ABSTRACT OF THE DISCLOSURE

Iterative metric updating when decoding LDPC (Low Density Parity Check) coded signals and LDPC coded modulation signals. A novel approach is presented for updating the bit metrics employed when performing iterative decoding of LDPC coded signals. This bit metric updating is also applicable to decoding of signals that have been generated using combined LDPC coding and modulation encoding to generate LDPC coded modulation signals. In addition, the bit metric updating is also extendible to decoding of LDPC variable code rate and/or variable modulation signals whose code rate and/or modulation may vary as frequently as on a symbol by symbol basis. By ensuring that the bit metrics are updated during the various iterations of the iterative decoding processing, a higher performance can be achieved than when the bit metrics remain as fixed values during the iterative decoding processing.